

REMARKS

Claims 1-25 are pending in the application. By this paper, claims 1-3 and 6-10 have been amended and claims 11-25 have been added. No new matter is added by this amendment. Reconsideration and allowance of claims 1-25 are respectfully requested.

Prior Art Rejections

Claims 1-2

Claims 1-2 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 5,991,287 to Diepstraten et al. (“Diepstraten”) in view of U.S. Pat. No. 5,987,062 to Engwer et al. (“Engwer”). The Office Action asserts that it would have been obvious to modify Diepstraten and Engwer, such that at least one central server through a wireless network comprising a plurality of wireless radiofrequency transmitting access points, does measuring/storing/comparing the signal strengths of access points, to provide means for users moving freely in the area where the central server is based. Applicant traverses this rejection because Engwer fails to teach the limitations of claim 1 as explained below.

Claim 1 recites a localization method comprising “storing each measured signal strength with an address identifying the corresponding connected access point” and “comparing stored signal strengths to values of a predetermined table of signal strength thresholds assigned to access points, the signal strength thresholds defining one or more event zones (EZ), each event zone (EZ) comprising one or more attenuation ranges of one or more access points.” The combination of Diepstraten and Engwer fails to teach or suggest the limitations of claim 1.

Diepstraten does not teach or suggest the recited localization method of claim 1. As the Office Action admits, Diepstraten fails to disclose the recited features of claim 1, for example, “storing each measured signal strength with an address identifying the corresponding connected access point,” “comparing stored signal strengths to values of a predetermined table of signal strength thresholds assigned to access points, the signal strength thresholds defining one or more event zones (EZ), each event zone (EZ) comprising one or more attenuation ranges of one or more access points” and “considering the station as

located in a given event zone if the measured signal strength corresponding to an access point in the given event zone is within an attenuation range of that access point.” However, the Office Action asserts that Engwer teaches such features of claim 1.

Engwer discloses a wireless LAN supporting roaming of mobile units. Access points communicate with the mobile units. The mobile units roam based on communications link quality. The communications link quality is determined based on a mean error free length (MEFL) of a test pattern that is broadcasted by each access point and received by the mobile units (Col. 4, lines 37-40 and 61-63). The test pattern is a digital data message. The accurate measurement of link quality is provided to the mobile units to determine whether it should change its association to another access point having better communications link quality.

Engwer does not teach or suggest the recited features of claim 1. Rather, Engwer teaches away the recited features of claim 1 by disclosing that the RSSI (received signal strength indicator) is not employed to measure the communications link quality. *See* Engwer, Col. 2, lines 21-25 and lines 38-42. Engwer also does not teach any correlation with MEFL and RSSI. Accordingly, Engwer does not teach or suggest the recited features of claim 1, for example, “storing each measured signal strength with an address identifying the corresponding connected access point,” and “comparing stored signal strength to values of a predetermined table of signal strength thresholds defining one or more event zones (EZ), each event zone (EZ) comprising one or more attenuation ranges of one or more access points.” Therefore, the combination of Diepstraten and Engwer does not teach or suggest all of the features of claim 1.

Claim 2 depends from claim 1 and therefore includes all of the features of claim 1 plus additional features. None of Diepstraten and Engwer teaches or suggests claim 2 for at least reasons described above. Reconsideration and withdrawal of claims 1 and 2 are respectfully requested.

Claims 3-7

Claims 3-7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Diepstraten in view of Engwer. The Office Action asserts that it would have been obvious to

modify Diepstraten and Engwer to teach a communication method recited in claims 3-7.
Applicant traverses this rejection.

Claim 3 recites a communication method comprising “comparing signal strength received by said station from at least one second access point with at least one signal strength threshold used for defining at least one event zone.”

As the Office Action admits, Diepstraten fails to disclose the recited feature of claim 3. Further, Engwer does not teach or suggest the recited feature of claim 3, for example, comparing the signal strength with the signal strength threshold used for defining at least one event zone. As explained above, Engwer teaches away from use of the signal strength. *See* Engwer, Col. 2, lines 21-25 and 38-42. In this regard, the Office Action asserts that Fig. 3 of Engwer illustrates Best AP means as highest signal strength. However, in Engwer, the link quality is determinative of the chosen access point and there is no disclosure that the communications link quality is based on the highest signal strength. Engwer merely discloses that the communications link quality is determined based on the MEFL of a test pattern, which is a digital message. *See* Engwer, Col. 2, lines 45-49 and Col. 3, lines 4-6. Engwer fails to teach any correlation between the signal strength and MEFL, and indeed teaches against using the signal strength, as noted above. Accordingly, Engwer does not teach or suggest comparing received signal strengths as recited by claim 3.

Based on the above, neither Diepstraten nor Engwer teaches or suggests claim 3, either individually or in combination. Claims 4-7 directly depend from claim 3 and include all of the features of claim 3 plus additional features. Therefore, neither Diepstraten nor Engwer teaches or suggests claims 4-7 at least for reasons above. Reconsideration and withdrawal of the rejections to claims 3-7 are respectfully requested.

Claims 8-10

Claims 8-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Diepstraten in view of Engwer. The Office Action asserts that it would have been obvious to modify Diepstraten and Engwer to teach the communication system recited in claims 8-10. Applicant traverses this rejection.

Claim 8 recites a communication system comprising “means to define, with at least a signal strength threshold of at least one access point, at least one event zone (EZ) in which at least one specific application of the server is to be available to the station if present in that zone” and “means to localize the mobile station with respect to an event zone boundary, based on the signal strength received by the mobile station from the access points.”

Diepstraten does not teach or suggest the recited features of claim 8, for example, “means to define, with at least a signal strength threshold of at least one access point, at least one event zone (EZ)” and “means to localize the mobile station.” Nor does Engwer teach or suggest the means to define and the means to localize the mobile station. Further, as explained above, Engwer discloses use of an MEFL of a test pattern to determine communications link quality and teaches away from use of the signal strength. Accordingly, none of Diepstraten and Engwer teaches or suggests claim 8, either individually or in combination.

Claims 9-10 depend from claim 8 and therefore include all of the features of claim 8 plus additional features. Diepstraten and Engwer do not teach or suggest claims 9-10 at least for reasons described above. Reconsideration and withdrawal of the rejections to claims 8-10 are respectfully requested.

New Claims

Claims 11-15 indirectly depend from claim 8 and so are patentable for at least the same reasons given above in conjunction with claim 8. Neither Diepstraten nor Engwer, alone or in combination, teaches or suggests all of the features of claims 11-15.

Claims 16-25 are patentable for reasons that they each cite a wireless communication system comprising “a database comprising an event zone table of the access point addresses and corresponding signal strength thresholds wherein each event zone is defined at least with a signal strength threshold” and a server “operable to . . . compare the received signal level measurement with a signal strength threshold for the assigned access point and determine whether the mobile station is located in the defined event zone.” None of the cited

Application no. 10/510,415
Amendment dated: September 28, 2005
Reply to office action dated: June 30, 2005

references teaches or suggests claims 16-25, either individually or in combination.

Therefore, claims 11-25 are patentable and should be allowed.

CONCLUSION

For all of the above reasons, Applicant respectfully requests reconsideration and allowance of the present application. The Examiner is invited to contact the undersigned attorney at the below-listed number if there are any outstanding issues that could be resolved through a telephone conference.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Marc V. Richards", is written over a horizontal line.

Marc V. Richards, Reg. No. 37,921
Attorney for Applicant

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, ILLINOIS 60610
(312) 321-4200